CLAIMS

I/we claim:

1. A headlamp apparatus for a vehicle comprising:

a steering device coupled to a steering wheel; and

control means for controlling a light distribution of the headlamp based on a steering angle of the steering device, wherein the control means detects a straight steering position of the steering device from an origin position signal output by the steering device for each rotation of the steering wheel and wheel speeds of a left wheel and a right wheel of the vehicle.

2. The headlamp apparatus according to claim 1, wherein the control means detects the straight steering position based on the origin position signal when a difference between a left wheel speed and a right wheel speed is equal to or less than a predetermined value.

3. The headlamp apparatus for a vehicle according to claim 1, wherein the control means detects the straight steering position when a vehicle speed of the vehicle has at least a predetermined value.

4. The headlamp apparatus for a vehicle according to claim 1, wherein the control means detects the straight steering position and corrects the straight steering position based on at least one of an integrating time in a steering angle position and an integrated running distance.

5. A headlamp apparatus for a vehicle, comprising:

a first speed sensor that is coupled to a first wheel and senses a first wheel speed, and a second speed sensor that is coupled to a second wheel and senses a second wheel speed;

a steering sensor that is coupled to a steering shaft of a steering wheel for turning said vehicle and detects a degree of rotation of said steering wheel; and

a controller that controls light distribution in a headlamp

and initializes a straight position of said headlamp when said first wheel speed and said second wheel speed exceed or equal a first threshold, and when a difference between said first wheel speed and said second wheel speed is equal to or less than a second threshold.

6. The apparatus of claim 5, further comprising:

a vehicle velocity sensor that senses a vehicle velocity, wherein said controller initializes said straight position when said vehicle velocity exceeds or equals a third threshold.

7. The apparatus of claim 5, further comprising at least one actuator for adjusting a position of said headlamp in response to an output from said controller.

8. The apparatus of claim 5, said steering sensor further comprising:

a rotary disk attached to said steering shaft and having a plurality of unit slits circumferentially positioned on said rotary disk, and an origin slit positioned at an inside diameter of said unit slits;

at least one origin slit detector that generates an origin position signal when said origin slit passes said origin slit detector; and

at least two unit slit detectors separated at a half pitch from each other on said circumferential position of said unit slits, to generate respective at least two pulse signals, wherein said controller controls said light distribution by adjusting said headlamp based on said degree of rotation.

9. A method of controlling a light distribution of a headlamp, comprising:

comparing at least one wheel speed with at least one first reference value;

when said at least one wheel speed is greater than or equal to said at least one corresponding first reference value and

a difference between ones of said at least one wheel speed is equal to or less than a second reference value, in response to an original position signal indicative of a position of a steering wheel, initializing a substantially straight steering position value; and

controlling light distribution in a headlamp in accordance with said original position signal and a plurality of unit signals indicative of a running direction of said vehicle.

10. The method of claim 9, said comparing further comprising comparing a velocity of said vehicle with a third reference value, and performing said initializing when said velocity is greater than or equal to said third reference value.